

SSC Presentation February 3, 2021

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EFP GOALS

- Prosecute the pollock allocation directed to The Aleut Corporation while testing methods to minimize POP bycatch,
- Limiting POP bycatch morality and waste in a fully prosecuted AI pollock fishery through full retention and accounting of POP bycatch while limiting overall POP catch to 500 tons,
- Improving safety at sea by reducing the amount of time necessary to stow catch by eliminating the need to sort POP from the catch on deck, and
- Gathering relevant data on timing and location of POP bycatch during the EFP AI pollock fishery that may be examined for correlations to determine means of reducing bycatch rates.

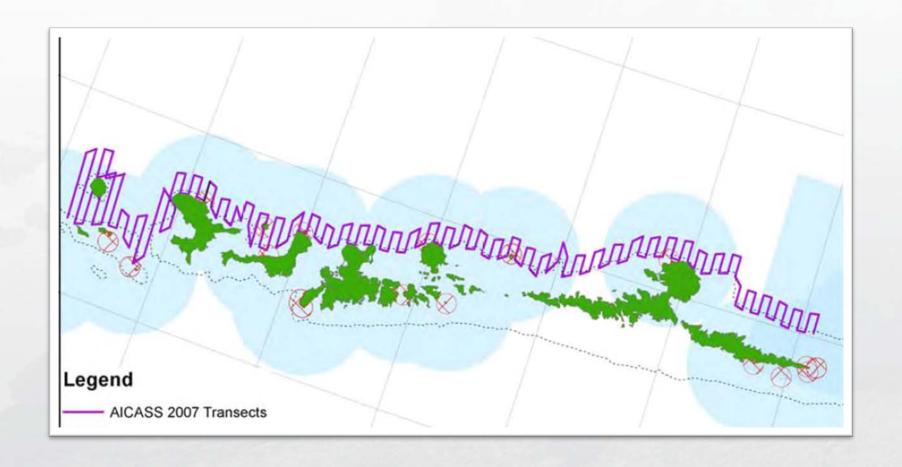




HISTORY AND BACKGROUND

- In 2004, the US Navy closed Adak facilities transferring land and assets to The Aleut Corporation.
- Congress enacted legislation authorizing an annual allocation of AI pollock to The Aleut Corporation for the economic development of Adak.
- A converted warehouse has been used as shore-based processing plant since 2004;
 however lack of access to Federal fish has significantly hampered operations.
- Since the mid-1990's, AI POP survey biomass has more than doubled (pg. 36 Dec 2018 SAFE – Table 12.9).
- The ratio of POP to pollock survey biomass in the AI is a 6:1in favor of POP (Summary of AI Groundfish Survey, Table 1A.10)

STATISTICAL AREAS FISHED





2020 EFP HAULS





2020 EFP FISHING VESSELS

Muir Milach – 102' trawler

- Hydroacoustic gear includes a Simrad ES-60 down sounder with 38kHz split beam transducer, a Furuno 1100 down sounder, a Wesmar 860 sonar and a Wesmar 770 3rd wire netsounder.
- Configured with sorting belt on the main working deck.

FV Bristol Explorer – 180' trawler

- Hydroacoustic gear includes a Furuno 1200 down sounder, a Simrad ES-80 down sounder, a Simrad SN-90 sonar and a Simrad FS-70 3rd wire net sounder.
- Configured so codend empties on deck where sorting occurs with tanks then filled and bycatch placed in baskets for discard.

FV Northwest Explorer – 162' trawler

- Hydroacoustic gear includes a Simrad ES-60 down sounder, a Furuno 50kHz down sounder, a Simrad FS-90 3rd wire net sounder and a CH15 sonar.
- Configured with a below deck sorting area and discard chute.



SUMMARY OF RESULTS

2019 Results

Muir Milach resulted in 5 hauls, small data set.

2020 Results

- 3 vessels made 28 hauls resulting in 702 tons of pollock and 107 tons of POP.
- Successfully collected relevant haul data.
- POP bycatch rates ranged from 0% to 100%, such extreme variability presents challenges to identify statistical tests for correlations to reduce POP bycatch.
- Regression analyses were performed for data sets (bottom depth, fishing depth, bottom vs net depth, time of day, duration of set, current direction, current speed and longitude of tow) resulting in very low R² values.
- Location fished resulted in the greatest impact on POP bycatch rates with pollock CPUE 50% larger in 542 (Kanaga Sound) versus 541 (Atka east and west of North Cape).



POP Rates Summaized by Area From Fish Ticket Weights (Lbs)						
		Fish TIcket		Fish	POP as %	POP as %
		Pollock +	Fish Ticket	Ticket	of Pollock	of Total
Vessel	Area	POP Lbs	Pollock Lbs	POP Lbs	Lbs	Lbs
Fleet	All	1,785,185	1,548,221	236,492	15.3%	13.2%
Fleet	541	755,585	632,094	220,581	34.9%	29.2%
Fleet	542	1,029,600	916,127	15,911	1.7%	1.5%
MM	All	316,358	306,040	9,846	3.2%	3.1%
MM	541	55,365	46,740	8,576	18.3%	15.5%
MM	542	260,993	259,300	1,270	0.5%	0.5%
BEX	All	977,238	850,348	126,890	14.9%	13.0%
BEX	541	585,287	472,236	113,051	23.9%	19.3%
BEX	542	391,951	378,112	13,839	3.7%	3.5%
NWX	All	491,589	391,833	99,756	25.5%	20.3%
NWX	541	114,933	113,118	98,954	87.5%	86.1%
NWX	542	376,656	278,715	802	0.3%	0.2%



HOW DID WE DO?

Success defined as full harvest of A Season DFA of 10,361 tons of pollock within the 500 ton POP constraint.

- ❖ 702 tons of pollock caught with 107 tons POP (15.3% POP rate)
- ❖ Actual harvest would have been limited to 3,279 tons of pollock at observed rate.

All POP was retained and processed.



CAPTAIN INTERVIEWS

Large degree of variability in pollock biomass creates considerable uncertainty that AI can support A season pollock fishery if POP bycatch constraint is removed.

Vessel capability and configuration contribute to likely success.

Knowledge of the fishing areas is a key component to avoid POP. The distance of the net off bottom seems to be best indicator.

Differentiation between pollock & POP from echo and net sounders was difficult at best.

Only found both pollock & POP during hours of darkness.



SUMMARY

- Only 702 tons (7%) of The Aleut Corporation pollock allocation was harvested.
- Regression analyses did not reveal any significant influence of the variables evaluated, with the exception of area fished.
- Captains interviews indicated that they feel that in their experience there is a correlation between POP% and distance of the net off bottom, and that local knowledge is important.
- Discard waste was avoided as a result of the exemption of the 5% MRA requirement.
- Safety was enhanced by avoiding prolonged time on deck that would have been required to sort and discard POP under an MRA regime.
- All three vessels collected hydroacoustic data which was forwarded to the Alaska Fisheries Science Center.



QUESTIONS?

Our thanks to the three captains: Ray Haddon, David Wilmore and Brian Haley.

Thanks also to Steve Barbeaux for his help with the design of this project.

